## WEATHER ON THE ATLANTIC AND PACIFIC OCEANS

## NORTH ATLANTIC OCEAN

By F. A. Young

A marked decrease was noticed in the number of days with gales during April as compared with March. In the former month they were not reported on more than 4 days in any 5° square, or on more than 2 days east of the thirtieth meridian. Another noticeable feature was that over 80 per cent of the gales occurred in the first half of the month.

Fog over the Grand Banks was less frequent than usual, while the number of days on which it occurred was not far from the normal along the American coast between Hatteras and Newfoundland and considerably above over the steamer lanes between the twentieth and thirty-fifth meridians, where it was reported on from 6 to 9 days.

Table 1.—Averages, departures, and extremes of atmospheric pressure at sea level, 8 a. m. (seventy-fifth meridian), North Atlantic Ocean, April, 1927

Stations	Average pressure	Depar- ture 1	High- est	Date	Low- est	Date
Belle Isle, Newfoundland Halifax, Nova Scotia Nantucket Hatteras Key West New Orleans Swan Island Turks Island Bermuda Horta, Azores Lerwick, Shetland Islands Valencia, Ireland London	Inches 29. 81 29. 97 30. 04 30. 10 30. 03 30. 04 20. 88 30. 07 30. 12 30. 16 29. 66 30. 04 29. 96	Inch -0.02 +.08 +.06 +.09 +.01 +.0410 +.05 +.12 +.0514 +.15 +.09	30, 10 30, 34 29, 94 30, 16 30, 32 30, 54 30, 06	22d 2 1stdo 21st 12th	Inches . 25, 92 . 29, 26 . 29, 48 . 29, 72 . 29, 92 . 29, 58 . 29, 58 . 29, 78 . 29, 46 . 29, 46	10th. 28th. Do. 30th. Do. Do. Do. 28th. 10th. 27th. 22d. 8th. 9th.

 $^1$  From normals shown on Hydrographic Office Pilot Chart based on observations at Greenwich mean noon, or 7 a. m., seventy-fifth meridian,  $^2$  And on other dates.

The results for Julianehaab, Greenland, are omitted, as observations for 12 days are missing. Judging from reports received from that place there was a period of low pressure there during the second decade, with a minimum barometric reading of 29.26 inches on the 15th. Anticyclonic conditions prevailed during the last decade, apparently culminating on the 25th or 26th, as readings of 30.36 inches were recorded on both dates.

On the 1st there were three well-defined disturbances over the ocean; the first, a shallow depression off the American coast between Hatteras and the Virginia capes; the second, central near Sydney, Nova Scotia, and the third near 45° N., 35° W. On the 2d the position of these Lows had changed but little, and on both dates moderate gales were reported by a number of vessels west of the thirtieth meridian. By the 3d the first disturbance had increased in intensity and was central near 36° N., 66° W., with strong northeast gales prevailing between the Bermudas and coast of Maine; the second and third disturbances had apparently combined, and occupied the position of the latter on the previous day, while moderate westerly gales occurred in the southerly quadrants.

During the next 24 hours both of the Lows moved rapidly eastward, and on the 4th the center of the western was near 33° N., 45° W., and the eastern near 53° N., 22° W., while gales of increased force still prevailed between the forty-fifth and fifty-fifth parallels, and the twentieth and thirty-fifth meridians. On the 5th the

eastern disturbance was near 57° N., 15° W., and on the 6th off the north coast of Scotland, while on both dates moderate weather prevailed over the greater part of the ocean.

The eastern Low moved but little during the next 24 hours, while on the 7th a depression moved over Newfoundland, and strong southwest gales prevailed between the Bermudas and the fortieth parallel, the station at New York reporting, wind NW., force 9. On the same day northwesterly gales were also reported over the eastern section of the steamer lanes.

Charts VIII to XI show the conditions from the 8th to 11th inclusive, which was the stormiest period of the month

On the 12th southerly to westerly gales occurred over a limited area in mid-ocean, and northerly gales in the North Sea. On the same day, and also on the 13th, a well-developed depression was over the Straits of Gibraltar, and vessels in that vicinity, as well as along the coasts of Spain and Portugal, encountered winds of force 7 to 8.

On the 13th and 14th an area of low pressure overspread the western section of the Gulf of Mexico, although judging from reports received to date, it was not accompanied by heavy winds.

On the 15th and 16th anticyclonic conditions prevailed generally, except that on the latter date and also on the 17th there was an area of low pressure off the south coast of Iceland, attended by strong westerly gales in the southerly quadrants.

On the 17th St. Johns, Newfoundland, was about 300 miles north of the center of a Low that remained nearly stationary during the next 24 hours and then moved slowly northeastward. On the 18th northerly gales were reported by vessels in the westerly quadrants.

On the 20th an area of low pressure was central near 50° N., 35° W., accompanied by moderate weather near the center, while gales were reported between the thirty-fifth and forty-second parallels, near the thirty-fifth meridian.

On the 22d and 23d the stations on the north coast of the Gulf of Mexico reported high barometric readings, Galveston recording 30.42 inches on the 22d. As a result of this high pressure a moderate "norther" prevailed in the Gulf on both days.

On the 22d an area of low pressure to the southward of Iceland was responsible for southwesterly gales off the coasts of Scotland and northern Ireland.

On the 23d one of those peculiar disturbances that sometimes appear suddenly in southern waters was central near 35° N., and 45° W.; the storm area was of limited extent but the force of the wind was the highest reported during the month, as shown by the storm report of the British steamship *Tiverton*.

On the 25th Shields, England, was near the center of a deep depression and westerly winds of force 7 prevailed as far west as the twentieth meridian.

On the 27th Father Point, Quebec, was near the center of a Low that drifted slowly eastward and on the 30th was off the west coast of Newfoundland. On the 28th gales were encountered by vessels in the southerly quadrants, and winds of force 8 were reported by the land stations at New York and Port au Basque, Newfoundland.